plane of said horizontal platforms of said wafer holders; and cooling means associated with each horizontal platform in fluid flow communication with said gas supplying means and located such that resulting gas flows permit the positioning of the platform near a holder and improve cooling of individual areas over the wafer surfaces while avoiding the need to provide additional cooling of said plasma generator due to natural convection of the hot gases.

3. A device as defined in claim 2, wherein said plasma jet generator is mounted on a base on a height adjustable support that allows the treatment temperature to be changed according to desired treatment or processing of said wafers.

4. A device as defined in claim 2, further comprising a manipulator; storage devices for the wafers to be treated; and a closed chamber having a gas exchange system with the wafer holders and a plasma jet generator located inside said chamber.

5. A device as defined in claim 4, wherein said closed chamber is provided with a window in which a movable shutter is mounted, said manipulator being located to contact with said storage devices directly and with said wafer holder indirectly, through the chamber window.

6. A device as defined in claim 2, wherein said cooling means comprises a plurality of chambers each in proximity to and open in the direction of a wafer held in a position for

treatment, said chambers being connected to said gas supplying means.

7. A device for treating wafers with a plasma jet, comprising a plasma jet generator; gas supplying means; a set of holders for wafers to be treated, said holders having a drive for effecting angular displacement thereof and for facing a generator plasma jet; each of the holders being made in the form of a horizontal platform mounted for rotation about an axis passing through a geometric center thereof and perpendicular to a plane of said platform; said plasma jet and wafer holders being displaced with respect to each other and may be in or out of contact with each other; a plasma jet generator located such that a plasma jet is directed in the direction of said horizontal platforms of said wafer holders, each wafer holder being provided with at least three vortex chambers and three tangential channels in fluid flow communication between said gas supplying means and said chambers, said chambers defining axes substantially perpendicular to a plane of said horizontal platforms; each of said vortex chambers being provided with an open portion located on a level end surface of the wafer holder, coupled through the tangential channel to said gas supplying means and located such that resulting vortex flows formed permit the positioning of each wafer near the holder-and-cooling of its individual areas to equalize, over each wafer surface, an amount of energy used for treating the wafer surfaces.

8. A device as defined in claim 7, further comprising a manipulator; storage devices for the wafers to be treated; and a closed chamber having a gas exchange system with the wafer

holders and a plasma jet generator located inside said chamber.

9. A device as defined in claim 8, wherein said closed chamber is provided with a window in which a movable shutter is mounted, said manipulator being located to contact with said storage devices directly and with said wafer holder indirectly, through the chamber window.

A1 Cont

10. A device for treating wafers with a plasma jet, comprising a plasma jet generator; gas supplying means; a set of holders for wafers to be treated, each having an edge, said holders having a drive for effecting angular displacement thereof and for facing a generator plasma jet; each of the holders being made in the form of a horizontal platform mounted for rotation about an axis passing through a geometric center thereof and being perpendicular to a plane of said platform; said plasma jet and wafer holders being displaced with respect to each other and may be in or out of contact with each other, a plasma jet generator located such that a plasma jet is directed in the direction of said horizontal platforms of said wafer holders, each of the wafer holders being provided with a limiter at the edges and cooling means associated with each horizontal platform in fluid flow communication with said gas supplying means and located such that resulting gas flows permit the positioning of each wafer near a holder and cooling of its individual areas, said limiters on the wafer holder platforms having lengths and being arranged to limit maximum deviation from axisymmetric arrangement of the treated wafers during treatments thereof.

11. A device as defined in claim 10, further comprising a manipulator; storage devices for the wafers to be treated; and a closed chamber having a gas exchange system with the wafer holders and a plasma jet generator located inside said chamber.

12. A device as defined in claim 11, wherein said closed chamber is provided with a window in which a movable shutter is mounted, said manipulator being located to contact with said storage devices directly and with said wafer holder indirectly, through the chamber window.

A1 Cont

13. A device as defined in claim 10, wherein said limiters on the wafer holder platforms are fabricated as rods mounted at an angle $\alpha > 90°$ to the plane of said horizontal platform of the wafer holder, and their length, l, is chosen such that

$$21 \sin (\alpha > 90°) > \Delta,$$

where Δ denotes a maximum deviation from axisymmetric arrangement of the treated wafers during treatments thereof.

REMARKS

This Amendment is responsive to the Office Action mailed August 2, 1999. The Examiner's arguments have been carefully considered.

A three month extension of time has been requested to extend the due date for response to February 2, 2000. A check in the amount of the extension fee is enclosed.

The Examiner has objected to the drawings because the figures have not been properly